USING SIMULCAST TO IMPROVE WIRELESS SYSTEM FUNCTIONALITY ALONG CORRIDORS

ABSTRACT OF THE DISCLOSURE

A method and apparatus for providing wireless signal communications through multiple coverage areas that include narrow corridors along which much of the mobile traffic travels. The corridors are interconnected at junctions where vehicle traffic tends to slow down or stop. The invention in particular, involves a method whereby simulcast communication is used for signal communication among base station locations along the narrow corridors. In this simulcast mode, the system equipment uses the same radio frequency to provide wireless coverage in a sequence of related sites located along the corridor. Using simulcast channels, the need for handoff is reduced and or eliminated. At the junctions, the usual base transceiver station (BTS) arrangement may be provided whereby multiple radio channels are available and handoff processing occurs.